

Title (en)

STEERING SYSTEM FOR OUTBOARD ENGINE

Title (de)

LENKSYSTEM FÜR EINEN AUSSENBORDMOTOR

Title (fr)

SYSTÈME DE DIRECTION POUR UN MOTEUR HORS-BORD

Publication

EP 2604508 B1 20190417 (EN)

Application

EP 11816251 A 20110502

Priority

- JP 2010181353 A 20100813
- JP 2011060535 W 20110502

Abstract (en)

[origin: EP2604508A1] Support arms (40, 41) are disposed on a tilting shaft (32) on a bracket (30) of an outboard motor. An electric actuator (50) is mounted between the support arms (40, 41). The electric actuator (50) includes a cover member (51), first and second electric motors (52, 53) disposed individually on the opposite ends of the cover member (51), a feed screw (54) configured to be rotated by the electric motors (52, 53), a nut member (70) configured to move along an axis (X1) as the feed screw (54) rotates, a drive arm (71) configured to move integrally with the nut member (70) and transversely relative to the boat body (11), and protective boots (80, 81). The drive arm (71) is connected to a steering arm (35) through an engaging member (73). If the drive arm (71) moves in the direction of the axis (X1) along the cover member (51), the steering angle of the steering arm (35) changes depending on the degree of movement of the drive arm (71).

IPC 8 full level

B63H 20/12 (2006.01); **B63H 25/24** (2006.01)

CPC (source: EP US)

B63H 20/12 (2013.01 - EP US); **B63H 25/24** (2013.01 - EP); **B63H 2025/028** (2013.01 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 2604508 A1 20130619; **EP 2604508 A4 20170426**; **EP 2604508 B1 20190417**; CN 103068673 A 20130424; CN 103068673 B 20160907; JP 5325998 B2 20131023; JP WO2012020585 A1 20131028; WO 2012020585 A1 20120216

DOCDB simple family (application)

EP 11816251 A 20110502; CN 201180039571 A 20110502; JP 2011060535 W 20110502; JP 2011546463 A 20110502